Proving that the conjecture is false would require the existence of an infinite family of \((A, B, C)\)'s whose ABC exponents approach a limit greater than 1, just as we had to construct an infinite family such as \((1, 2^r - 1, 2)\)...

**Conclusion:**

\[
\begin{align*}
A &= 1 \\
B &= (2^r - 2) \times 2^r \\
C &= (2^r - 1)^2
\end{align*}
\]

**Number-Examples:**

\[
\begin{array}{ccc}
2^2 & A & 1 \\
& B & 8 & (2^2 - 2) * 2^2 & (2*4) \\
& C & 3^2 & 9
\end{array}
\]

\[
\begin{array}{ccc}
2^3 & A & 1 \\
& B & 48 & (2^3 - 2) * 2^3 & (6*8) \\
& C & 7^2 & 49
\end{array}
\]
\[
\begin{array}{cccc}
2^4 & A & 1 \\
B & 224 & (2^4 - 2) * 2^4 & (14*16) \\
C & 15^2 & 225 \\
\end{array}
\]

\[
\ldots
\]

\begin{align*}
\text{rad } & C \cdot (C - 1 \text{ (maximum)} \cdot 1 < C^2 \\
= \text{rad}(ABC) < C \text{ infinite.}
\end{align*}

by
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